Amphenol

TB-2055

TUNING FORK CONTACT INSERTION TOOL FOR S1000, S1200, AND S1500 SERIES
PART NO. 600-0004-000

REVISION "-"

SPECIFICATION REVISION STATUS

Revision	SCR No.	Description	Initial	Date
"-"	26415	Initial Release (Supercedes TB-213)	H. Cook	12-18-98

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1.0 SCOPE

1.1 This technical bulletin covers Tuning Fork Contact Insertion Tools for S1000, S1200, and S1500 Series, Part No. 600-0004-000.

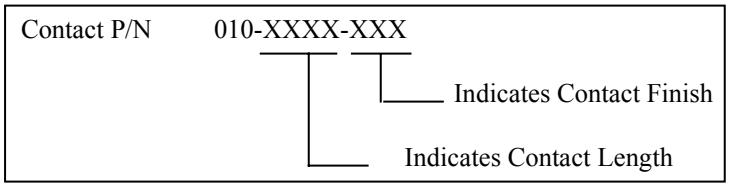
2.0 PROCEDURE

2.1 Intended Use – For insertion of replacement contacts into vacated contact positions in aluminum backplanes.

2.2 Method of Use

2.2.1 Be certain that the new contacts, insulators, or ground bushings are the correct replacement part.

2.2.1.1 Contact



2.2.1.2 Insulator

Part No.	Series
302-0002-002	S1000
303-0001-002	S1200
306-0000-002	S1500

2.2.1.3 Ground Bushing

Part No.	Series
516-0014-505	S1000
516-0015-505	S1200
516-0015-505	S1500

2.2.2 Support connector body with tuning fork end of contact facing up. The connector should rest on parallel supports approximately 1" high. The face of the supports should be covered with a protective material such as masking tape to prevent damage to the connector. The supports should be positioned to give maximum support to the connector in the area of contact insertion. With large plate connectors, it is more practical to lay the plate on a suitably sized sheet of 1" thick plastic foam.

2.2.3 Orientate and install the insulator or ground bushing into the vacant hole position.

2.2.4 Insert the new contact into the insulator or ground bushing making sure that the fork is oriented correctly. Push the contact down as far as possible using finger pressure.

2.2.5 Insert the blade of the insertion tool into the fork of the new contact.

2.2.6 Hold tool so that it is vertical to the connector in all planes and also so that the blade is in line with any other contacts in the same row (see Figure 1).

2.2.7 Press the tool down gently but firmly until the contact is fully seated. In the case of grounds, however, tap the tool gently with a small mallet until the contact is fully seated. Be careful not to tilt the tool from vertical as this may probe open the tuning fork.

2.2.8 Inspect for the following:

2.2.8.1 Contact is properly seated.

2.2.8.2 Contact is properly aligned with respect to the other contacts in the row.

2.2.8.3 To ensure that the contact has not been probed open, it is recommended that the contact gap be gauged. The contact must touch a .016 thick test blade. An alternate method is to measure the engagement and separation forces to meet the requirements of Specification NAVORD WS6157B.

2.2.8.4 To ensure that a reliable ground connection has been made after the contact installation of the ground bushing assembly, it is recommended that the backplane to contact resistance be measured (see Figure 2). At a test current of 3 amps, the maximum allowable resistance is 18 millivolts (see Specification NAVORD WS6157B).

NOTE: This tool is not intended for production use. Rows of contacts inserted by this tool do not, therefore, reflect the integrity of alignment made possible by volume production tools.

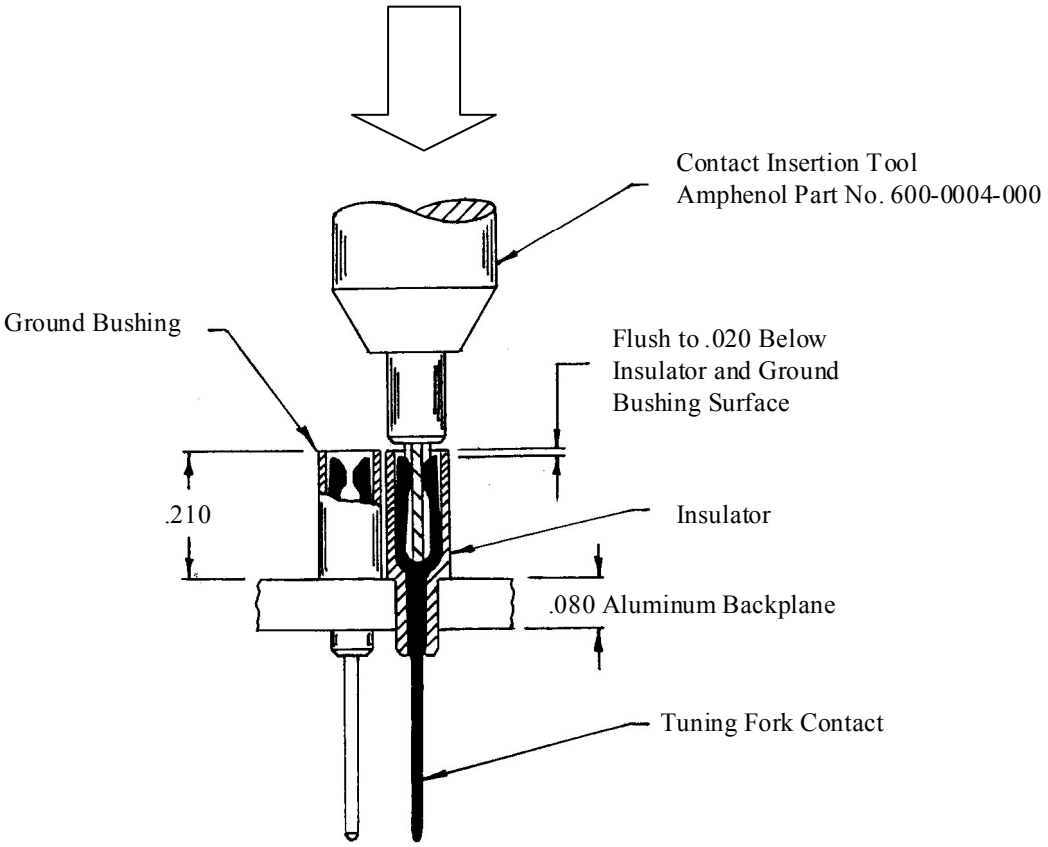

Contact Insertion Tool
Amphenol Part No. 600-0004-000
Ground Bushing
Flush to .020 Below
Insulator and Ground
Bushing Surface
.210
Insulator
.080 Aluminum Backplane
Tuning Fork Contact

Figure 1

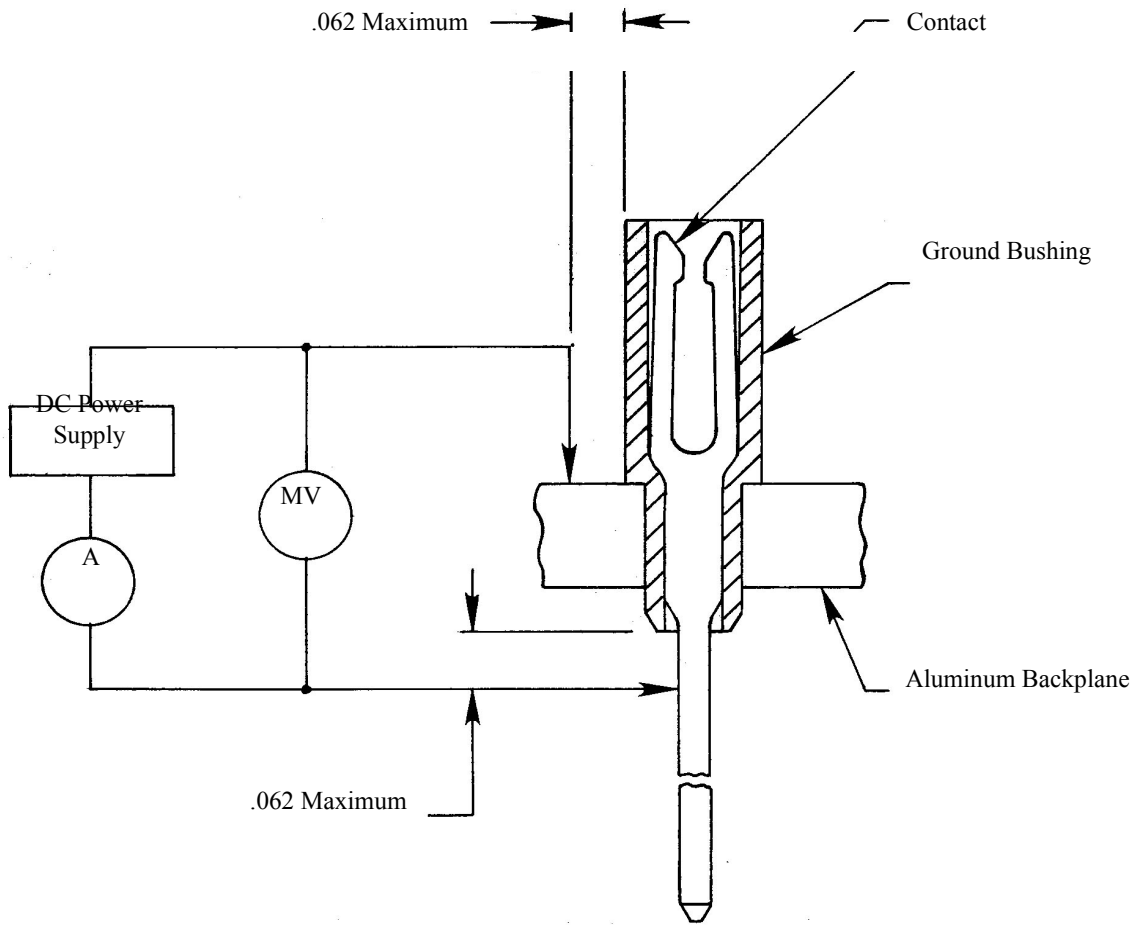


Figure 2
Test Set-Up for Measuring Backplane to Contact Resistance